

ABSTRACT OF THE DISCLOSURE

A robot control apparatus including a motion torque calculating section for calculating a motion torque command which is required  
5 for a motion of a servo motor, a disturbance torque estimating section for calculating a disturbance torque, a minute displacement relationship calculating section for calculating a minute displacement relationship between a task coordinate system of a robot and a joint coordinate system of the servo  
10 motor, an external force calculating section for carrying out a conversion to an external force on the task coordinate system, a force control section for calculating a position correction amount on the task coordinate system of the robot, and a joint angle correction amount calculating section for carrying out  
15 a conversion to a joint angle correction amount on the joint coordinate system.